



Purifying Household Water

The treatments described below work only in situations where the water is unsafe because of the presence of bacteria. If you suspect the water is unsafe because of chemicals, oils, poisonous substances, sewage, etc., do not use the water for drinking.

Storing water safely

- Store one gallon of water per person per day.
- Store at least a three-day supply of water per person.
- Collect the water from a safe supply.
- Store water in thoroughly washed plastic, fiberglass or metal containers that are lined with enamel.
- Never reuse a container that contained toxic materials such as pesticides, solvents, chemicals, oil, antifreeze, etc.
- Plastic containers such as soft drink bottles are best. You can also purchase food-grade plastic buckets or drums.
- Seal water containers tightly, label with date, and store in a cool, dark place.
- Replace water every six months.

Water purification

There are two primary ways of treating water: boiling and adding bleach. If the supply has been made unsafe because of untreated surface water (from floods, streams or lakes), boiling is the best method.

- Cloudy water should be filtered before boiling or adding bleach.

- Filter water using coffee filters, paper towels, cheese cloth, or a cotton plug in a funnel.

Boiling

- Boiling is the safest method of purifying water.
- Bring the water to a rolling boil for 3-5 minutes.
- Let the water cool before drinking.

Purifying by adding liquid chlorine bleach

- If boiling is not possible, water can be made safe for drinking by treating with liquid household chlorine bleach, such as Clorox, Purex, etc. Household bleach is typically between 5 percent and 6 percent chlorine. Avoid using bleaches that contain perfumes, dyes, and other additives. Be sure to read the label.
- Place the water (filtered, if necessary) in a clean container. Add the amount of bleach according to the table below. Mix thoroughly and allow to stand for at least 30 minutes before using (60 minutes if the water is cloudy or very cold).
- Purifying tablets or chemicals designed for use when camping or backpacking can also be an effective way to treat water. Always follow the directions on the package.



WASHINGTON
MILITARY
DEPARTMENT

Emergency Management Division
Camp Murray, WA 98430-5122

Web site: www.emd.wa.gov
253-512-7000; (800) 562-6108



Washington State Department of
Health

PO Box 47890
Olympia, WA 98504-7890

Web site: www.doh.wa.gov
360-236-4027; (800) 525-0127

Treating Water with a 5-6 Percent Liquid Chlorine Bleach Solution

Volume of Water to be Treated	Treating Clear Water: Bleach Solution to Add	Treating Cloudy, Very Cold, or Surface Water: Bleach Solution to Add
1 quart/1 liter	3 drops	5 drops
1/2 gallon/2 quarts/2 liters	5 drops	10 drops or 1/8 tsp
1 gallon	10 drops or 1/8 tsp	20 drops or 1/4 tsp
5 gallons	50 drops or 2.5 ml or 1/2 tsp	5 ml or 1 tsp
10 gallons	5 ml or 1 tsp	10 ml or 2 tsp

tsp = teaspoon; ml = milliliter